# SCITUATE BOARD OF HEALTH REGULATION #28 Fats, Oil & Grease (FOG) Pretreatment Systems

In accordance with 40 Code of Federal Regulations (CFR) Part 403; Massachusetts General Laws Chapter 111, section 31; and Title 5 of the State Environmental Code (310 CMR 15.), the Scituate Board of Health adopts the following regulation. The purpose of this regulation is to protect residents, businesses, public health, and the environment within the Town of Scituate from blockages of the Town's sanitary sewer system caused by grease, kitchen oils, and other substances discharged from food service facilities.

All references to 248 CMR shall mean the Code of Massachusetts Regulation for the Massachusetts State Plumbing Code.

#### **PURPOSE**

The purpose of this Regulation is to protect residents, businesses and the environment within the Town of Scituate from blockages of the Town's Sanitary Sewer caused by Fats, Oils, and Grease (FOG) discharged from food service establishments located in town. All new and existing facilities that generate and discharge FOG in the wastewater flow shall install, operate, and maintain a FOG pretreatment system, as further defined herein. The requirements of this Regulation shall supplement and be in addition to the requirements of the Town of Scituate's Sewer Use Rules and Regulations.

#### 1. Definitions

Agent – means any duly authorized agent of the Scituate Health Department as specified under MGL C. 111 Sec 30.

Board - The Scituate Board of Health

Building Sewer – A pipe or pipes maintained and controlled by private persons for the purpose of conveying wastewater from the waste producing location to the sanitary sewer collection system.

Director - means the Director of the Scituate Board of Health.

Discharge Limit – one hundred (100) milligrams of Fats, Oils, and Grease per liter of wastewater, or a concentration, which will cause blockage to the municipal sewer system.

DPW - Town of Scituate Department of Public Works.

FOG – Fats, Oils and Grease

FOG Pretreatment System - refers to one of the following grease removal systems:

- 1. Indoor Passive Grease Traps
- 2. Indoor Automatic Grease Traps
- 3. Outdoor/Underground Grease Interceptors

Food Establishment – is defined as any establishment issued a Permit to operate a food establishment by the Scituate Health Department under FC 1-201.10(B) (31) any facility that prepares or sells food and as a byproduct discharges Fat, Oil, or Grease into the Municipal Sewer system.

Food Service Facility – Any facility which prepares, serves, cuts, cooks, or bakes food, or which disposes of food-related wastes, including mobile food units, catering kitchens, residential kitchens that operate a food service business, food service facilities where the consumption of food prepared therein is intended to occur off-

premises, and any establishment issued a permit to operate a food service by the Board under 105 CMR 590.000.

Garbage Grinder – A device, which shreds or grinds up solid or semisolid waste materials into small particles for discharge into the sanitary sewer collection system.

Generator – A user of any food service facility who produces wastes from the user's process operations.

Grease – A material composed of fatty matter from animal or vegetable sources or hydrocarbons of petroleum origins. The terms "oil and grease", "fat oil and grease" or "oil and grease substances" shall be deemed grease by definition.

Grease Interceptor – A water-tight device constructed to separate and trap or hold oil and grease substances from the wastewater discharged from a facility in order to prevent oil and grease substances from entering the sanitary sewer system, also referred to as a "grease trap" or "grease recovery device." The grease interceptor may be may be an internal grease interceptor located within the facility, an external grease interceptor located outside the facility, or both, depending on sizing requirements of the food service facility.

Grease Trap – also referred to, as a grease interceptor by the State Plumbing Code, is a device designed to remove undissolved and/or suspended waste grease and oil from wastewater.

Indoor Automatic Grease Trap – an active automatic grease trap, which separates and removes fats, oils, and grease from effluent discharge, and cleans itself of accumulated grease, fats and oils at least once every twenty-four (24) hours, utilizing electromechanical apparatus to accomplish removal.

Indoor Passive Grease Trap – a passive grease trap installed inside a building and designed to remove fats, oils and grease from flowing wastewater while allowing wastewater to flow through it. Also known as an indoor grease trap.

Outdoor/Underground Grease Interceptor — a passive grease trap installed outside a building (having a capacity of 1500 gallons or more) and designed to remove fats, oils and grease from flowing wastewater while allowing wastewater to flow through it. Also known as an outside grease trap.

## PDI - Plumbing and Drainage Institute

Scituate Officials – any representative from the Scituate Health Department, Building Department or the Water and Sewer Division.

Sewage – Liquids and solids discharged from toilets, urinals, and other plumbing fixtures that are not intended for the disposal of grease and oil.

Sewer Pipe – means any building or town sanitary sewer piping including but not limited to interior and exterior building sanitary sewer piping, any main, or lateral sanitary sewer piping regardless whether it is located on private or municipal land.

### **Solids Interceptor**

- A water-tight device constructed to collect and hold solid substances, such as waste from a garbage grinder, apart from the wastewater discharged from a food service facility in order to prevent solids from entering the grease interceptor and from entering the sanitary sewer system, also referred to as a "solids trap."
- The solids interceptor may be located internally or externally to the facility, or both depending on the sizing required capturing solid discharging fixtures from the

food service facility. The solids interceptor is installed in the wastewater flow preceding the grease interceptor.

Substantial Renovations – means any renovation to a food service establishment that would increase the number of existing permitted seats or would alter in any way the kitchen facility.

User - The owner or operator of a food service facility.

Waste Grease or Oil – means waste grease or oil generated by a food establishment during the cooking process.

Wastewater – The liquid and water carrying domestic or industrial wastes from dwellings, commercial establishments, industrial facilities, institutions, restaurants, or any other facility which is deemed to produce liquid and water waste.

- Wastes may include, but are not limited to, discharges from scullery sinks, pots and pan sinks, ware wash sinks, compartment sinks, food prep sinks, cooking apparatus, dishwashing machines, soup kettles, floor drains locates in areas where grease-containing materials may exist.
- By definition, the terms "sewage" and "wastewater" refer to different discharges.

Warewash Sink – Any sink, compartment sinks, containers, buckets, or other device or vessel in a food services facility where utensils, dishware equipment and other items coming into contact with food are cleaned.

### IV. GENERAL PROVISIONS

- A. In every case where a food establishment is preparing or selling food, or other business in which FOG is a byproduct, a suitable FOG Pretreatment System that conforms to the Massachusetts State Plumbing Code 248 CMR 10.09(2), must be installed according to this Regulation.
- B. Waste grease and oil shall not be disposed by the sanitary sewer. All waste grease and oil must be collected in an appropriate container provided by an approved vendor and stored in an approved location on the premise.
- The container must be stored on an impervious surface such as concrete or pavement. Containers must be capable of being sealed or be stored in a sheltered area to prevent entry of precipitation and vermin.
- All waste grease and oil shall be removed by a permitted offal/septage hauler, said material should be removed from the premises as needed. While being stored, all grease containers and surrounding areas must be kept in sanitary condition at all times.

#### 2. Wastewater Discharge Requirements

- A. Waste, which contains grease, may be discharged from food service facilities only subject to the provisions and requirements of this article.
- The Board at any time may require a user to install, upgrade and/or relocate an indoor automatic grease trap, internal or external grease interceptor or indoor automatic grease trap, as it may deem necessary, to maintain any particular building sewer, any lateral sewer pipe, or sewer

main pipe free from obstructions caused by grease or oil discharged from a food service facility.

- B. When grease containing materials are processed through garbage grinders, the waste shall be directed first to a solids interceptor and then to a grease interceptor before any discharge to a wastewater drainage system.
- Wok lines, deep fryers, and other cooking equipment that use and discharge grease and/or oil shall have all drain lines, collection pans, and other grease-and-oil conveying systems directed through a grease interceptor before entering the wastewater drainage system, unless all grease and/or oil substances are fully contained and not connected to or conveyed to the drainage system. All waste shall enter the grease interceptor through the inlet pipe only.
- Toilets, urinals, and other plumbing fixtures shall not discharge sewage through the grease interceptor unless approval is granted in writing by the Board or its agent, and Massachusetts State Plumbing Board.
- C. All automatic electrical/mechanical grease removal units shall be sized in accordance with the manufacturers written recommendations and be in compliance with 248 CMR.
- D. Dishwasher wastewater must discharge into the grease trap per 248 CMR 10.09 (2)©(5). Food waste grinders must comply with the requirements of 248 CMR 10.09 (2)(f)(3).
- 3. Facilities Requiring Grease Interceptors

- A. New Facilities Users of all new proposed or constructed food service facilities and existing food service facilities where expansion of service capacity or renovation is proposed, shall install one or more grease interceptors conforming to applicable building, plumbing and health codes.
- B. Existing Facilities All existing food service facilities shall be required to install, modify or upgrade, as directed by the Board or its agent, an approved grease interceptor when any of the following occur:
- 1. When the Board or its agent, the Director of DPW, or the Town of Scituate Plumbing Inspector determines that an existing grease trap is undersized, nonfunctional, or not properly plumbed to all internal fixtures that generate grease or oil; or
- When food preparation or wastewater plumbing is repaired, replaced or redesigned, requiring a plumbing permit from the Scituate Building Department.
- 3. Design, Installation and Upgrade of Grease Interceptors
  - A. For internal grease interceptor(s), the Board requires that food service facilities install PDI-certified and Massachusetts State Plumbing Board approved automatic grease and oil removal units or grease recovery units.
  - B. Newly installed, upgraded, modified or repaired grease interceptors shall conform to the specifications, design and sizing approved by the Director and the Town of Scituate Plumbing Inspector.

- In addition, if a grease interceptor is required to be installed external to the facility, approval of specifications, design and sizing by the Scituate Department of Public Works is required if it is connected to the public sewer.
- Sizing of the grease interceptor shall conform to the PDI Standard, PDI-G101, with sizing requirements based on wastewater flow rates from the facility.
- C. External grease interceptor(s) shall be designed and properly located on the facility(s) property by a registered Massachusetts professional engineer, and a certified as-built drawing shall be submitted to the Board.
- In addition, a certified as-built drawing shall also be submitted to the DPW if a new connection to the sewer system has occurred.
- D. Common grease interceptors, internal or external, shall be sized to accommodate all the wastewater flows of the facility that are directed to the interceptor(s).

# 4. Location of Grease Interceptors

- The location where grease interceptor(s) shall be installed, including whether it shall be installed external to the food service facility, will depend upon building, site, environmental and interceptor sizing parameters.
- Each grease interceptor shall be installed and connected in a manner that makes it easily accessible for purposes of inspection, removal of the intercepted grease, cleaning and maintenance.

- Grease interceptor(s) shall be installed as far as possible from any part of the building where food is handled, prepared, and/or stored.
- Location of the grease interceptor(s) shall be approved by the Board or its agent, and the Town of Scituate Plumbing Inspector, and if external to the facility, the DPW.
- 5. Maintenance of Grease Interceptors
- All grease interceptors shall be maintained by the user at the user's expense.

The user shall conduct initial monitoring sufficient to identify the interceptor maintenance and cleaning requirements and to develop a written cleaning and maintenance plan that the user, his/her agents and employees shall thereafter comply with.

- At a minimum, the user or his/her designee shall inspect the grease interceptor(s) monthly; and, shall have all interceptors cleaned before the amount of grease exceeds 25% of the grease capacity of the interceptor or once every month for internal grease traps and once every three months for external grease traps, whichever comes first.
- Written logs of inspections, cleaning and pumping shall document data with respect to each internal and external grease interceptor, including the date of grease interceptor opening, an estimate of the amount of grease removed, the name of the person who inspected the interceptor or removed grease, and such person's signed initials or signature.
  - 6. Integration of Best Management Practices

- A. Food service facilities shall integrate best management practices to reduce grease discharged to the sewer system supplementary to grease trap(s) installation and maintenance.
- B. Best management practices include, but are not limited to:
  - (1) Use liquid oil instead of solid grease or lard,
  - (2) Dry wiping pots, pans, and dishes before putting them in the dishwasher or ware wash sink,
  - (3) Collecting and disposing of used grease and oil through a licensed grease hauler instead of pouring it down the drain,
  - (4) Capturing the grease and oil in ventilation and exhaust hoods.
- 7. Storage of Waste Grease and Oil from Food Preparation

All waste grease and oil and other related wastes requiring storage at the food service facility as a result of removal from grease interceptors or otherwise shall be collected and stored in appropriate container(s) in an approved location at the food service facility.

- Container(s) shall be stored on an impervious surface such as concrete or pavement. Containers shall be either sealed or stored in a sheltered area, and maintained to prevent entry of precipitation and animals. All grease containers and surrounding areas must be kept in a sanitary condition at all times.
- 8. Disposal of Waste Grease and Oil

- All waste grease and oil shall be removed from the facility by a permitted waste hauler. All material removed from grease interceptors, and hauling and disposal of grease and other related waste, shall be documented in a written manifest, which includes the identities and contact information of the generator, transporter and disposal facility.
- The generator is responsible for assuring that all waste grease and related wastes are disposed of in accordance with all federal, state and local disposal regulations.

## 9. Record Keeping

- A. All records pertaining to grease interceptor inspection, maintenance, cleaning, removing, transporting and disposing of waste grease and related wastes shall be retained by the food service user on the site for no less than two years, and shall be available upon request for review by the Board or its agent, the DPW or a Town of Scituate Plumbing Inspector.
- B. Upon request by an agent of the Board, a food service facility owner or operator shall furnish all information required to enforce and monitor compliance with this regulation.

## 10. Inspections of Interceptors

Authorized agents and employees of the Board, Scituate Plumbing Inspector, and/or DPW shall have the right to inspect, observe, measure, sample, test, photograph, and/or review documents with respect to the grease interceptor(s) and solid interceptor(s) within a food service facility, at any reasonable time and without prior notification.

## Timeline for Regulation Compliance

All food service establishments with 100 or more seats or more than 1,000 square feet shall be in compliance with this regulation by December 31, 2013.

All food establishments with 50-99 seats or 500 to 1,000 square feet shall be in compliance with this regulation by December 31, 2014.

All other food establishments shall be in compliance by December 31, 2015.

Failure to comply by these deadlines will affect the issuance of the Board of Health food establishment permit.

All food establishments shall submit a completed Board of Health form and project plan with a list of all contacts, no later than six months prior to deadline.

## 11. Request for a Hearing

Any user or other person who has received an order or notice issued pursuant to this regulation may request a hearing before the Board. Such request shall be in writing and shall be submitted to the office of the Board within 10 days after receipt of the order or notice.

#### 12. Variances

- A. The Board may grant a variance or exemption from any provision of these regulations when, in its opinion, the applicant for the variance has established that:
  - (1) Enforcement of the provision of this regulation from which a variance is sought would be manifestly unjust, considering all the relevant facts and circumstances; and

- (2) A level of protection to the Town of Scituate sanitary sewer system at least equivalent to that provided under this regulation can be achieved without strict application of the provision from which a variance is sought.
- B. Requests for variances from this regulation must be submitted in writing to the Board. Applicants for variances shall be afforded the opportunity to appear in person, including any representatives and experts, at a duly noticed public hearing held by the Board to consider the variance request. Information on food preparation, fats, oil and grease, and related waste produced by or discharged from the food service facility, size of the proposed grease interceptors, facility use, facility layout, plumbing plans and other relevant documents must be presented for review. Wastewater calculations, prepared by a Massachusetts licensed plumber, architect or engineer, may be presented to establish grounds for a variance.
- 13. Violations and Penalties; Enforcement; Time Frames for Compliance; Termination of Operations
  - A. It shall be unlawful for any user to discharge grease, oil, or any other substance into the sanitary sewer system in any manner, which is in violation of this regulation or any order or notice issued with respect thereto.
    - Any user who violates any provision of this regulation may be fined not more than \$100 for each violation under Chapter 40, Section 21D, of the Massachusetts General Laws and/or may be subject to injunction or other judicial order.

- 2. Each provision of this regulation that is violated, if more than one, shall constitute a separate offense, and each day that the violation continues shall constitute a separate offense.
- 3. The Board or its agent may serve upon any user a written notice stating the substance of the violation. Within 60 days of the date of such notice, a plan for correction of the violation shall be submitted to the Board by the user. The plan shall include a proposed date, subject to the approval of the Board or its agent, by which time the user shall achieve compliance with the regulation.
- 4. In the event that compliance is not achieved within such proposed and approved time, a monetary fine, as described herein, may be imposed or reinstated.
- B. The Board may, after providing opportunity for a hearing, order the termination of one or more particular operations at a food service facility for:
  - (1) Serious or repeated violations of the regulation,
  - (2) Substantial interference with the Board or other Town of Scituate officials in the performance of their duties,
  - (3) Knowingly keeping or submitting to Town of Scituate officials any false records or documents required to be maintained accurately by this regulation.

# 14. Severability

Each provision of this regulation shall be construed as separate to the end that if any part of it shall be held invalid for any reason, the remainder shall continue in full force and effect.

By Order of the Board of Health

Russell Clark, Chairman

Frank Lynch

Michael Vazza

Approved at February 27, 2012